



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#11
P7
7/25/03

Group Art: 3632
Examiner: Naschica S. Morrison
Applicants: Gerald Harris APPEAL BRIEF
Serial No.: 10/074,868
Filed: October 25, 2001
For: OVERBOOT FOR A BI-POD ADAPTER
Attorney Docket No.: 3408-000014/COA

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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GROUP 3600

Dear Sir:

This is Appellant's Appeal Brief to the Board of Appeals appealing the December 18, 2002 final rejection of Claims 20-34 of the above-identified application. A copy of the Examiner's Final Office Action dated September 7, 2001 is attached as Exhibit 1.

Claims 20-31 are rejected under 35 U.S.C. §112, second paragraph, as failing to set forth the subject matter which Applicant regards as his invention. In response to the §112 rejections, Appellant filed an Amendment After Final dated June 2, 2003, a copy of which is attached as Exhibit 2.

A Second Amendment After Final Rejection is concurrently filed and a copy is attached as Exhibit 3.

Serial No. 10/074,868 - Attorney Docket No. 3408-000014/COA

Claims 20-24, 27, 30 and 31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,711,103 to Keng ("Keng") in view of U.S. Patent No. 5,713,382 to Midcap ("Midcap") in view of U.S. Patent No. 4,964,430 to Janis ("Janis"), and further in view of U.S. Patent No. 2,799,287 to Wagner ("Wagner").

Claims 25 and 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner, and further in view of U.S. Patent No. 4,630,626 to Urban ("Urban").

Claim 28 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner and further in view of U.S. Patent No. 612,685 to Thorp et al. ("Thorp").

Claim 29 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner and further in view of U.S. Patent No. 4,947,882 to Levasseur ("Levasseur").

Claims 32 and 34 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner in view of Urban, and further in view of Thorp.

Claim 33 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner in view of Urban in view of Thorp, and further in view of Levasseur.

A copy of each reference is attached in Exhibits 4-10.

REAL PARTY IN INTEREST

Gerald Harris is the real party in interest, being the assignee of the present application.

RELATED APPEALS AND INTERFERENCES

To the best of Appellant's knowledge, no other appeals or interferences are pending which will directly affect or be directly affected by or have a bearing on the Board's decision in the present pending appeal.

STATUS OF THE CLAIMS

Claims 20-34 are pending in the application and stand rejected. Claims 20-23 and 27-31 are cancelled in the Second Amendment After Final Rejection filed concurrently with this Appeal Brief. Only the rejections of claims 24-26 and 32-34 are appealed.

STATUS OF THE AMENDMENTS

An Amendment after final was filed on June 2, 2003. The purpose of the Amendment was to address §112 issues. Appellant has no information as to whether this amendment was entered.

A Second Amendment after final is submitted herewith. The purpose of the Second Amendment after final is to reduce the number of claims on appeal. Claims 20-23 and 27-31 are cancelled in the Second Amendment After Final Rejection filed concurrently with this Appeal Brief and their rejections are not appealed.

SUMMARY OF THE INVENTION

The invention provides an overboot 24 for a foot portion 22 of a bi-pod assembly. A cross-sectional view of the foot portion 22 and the overboot 24 is shown in FIG. 2, which is reproduced below.

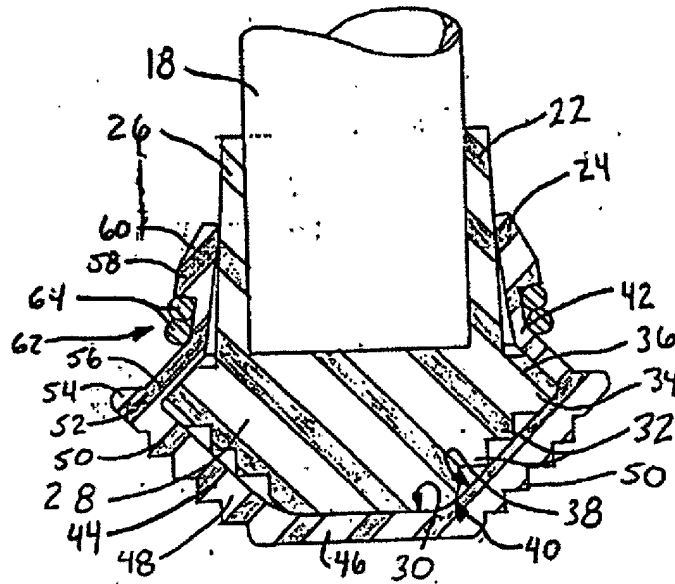


FIG. 2

The foot portion 22 is described in detail on page 4 of the specification, lines 12-20. The overboot 24 includes an inner surface 38 which is complimentary of the outer surface 40 of the foot portion 22. Specification, page 4, lines 21-22. The cup-like overboot 24 includes a cylindrical wall 42 integrally formed with a toroidal base 44. The toroidal base 44 is shaped as a truncated cone having a circular base 46 integrally formed with a cone

portion 48 projecting therefrom. The cone portion 48 terminates at the integrally formed cylindrical wall 42. Specification, page 4, line 22 to page 5, line 2.

A plurality of concentric ribs 50 radially project from the cone portion 48 of the base 4 between the circular portion 46 and the cylindrical wall 42. Specification, page 5, lines 3-4, and FIGS 2 and 3. The ribs are triangular. See FIG. 2 and claims 26 and 32. The rib 52 furthest apart from the circular portion 46 forms an annular flange 54. Specification, page 5, lines 6-9.

The cylindrical wall 42 includes a plurality of fingers 66 defined by triangular slots 68. The slots 68 accommodate the constriction of the cylindrical wall 42 by a band 64. Specification, page 5, lines 17-21 and FIG. 3. Each finger 66 includes a tab 70 and the plurality of tabs 70 form an annular ring 58. Specification, page 5, lines 21-23. Together, the annular flange 54 and the annular ring 58 define a recess 62. Specification, page 5, lines 8-10 and 23-24. The band 64 nests in the recess 62 for constricting the overboot 24 over the foot portion 22. Specification, page 5, lines 11-12.

ISSUES

Appellant presents the following issues for review:

- 1) Whether or not claim 24 is unpatentable under 35 U.S.C. §103(a) over Keng in view of Midcap, in view of Janis, and in further view of Wagner.
- 2) Whether or not claim 25 is unpatentable under 35 U.S.C §103(a) over Keng in view of Midcap, in view of Janis, in view of Wagner, and further in view of Urban.

3) Whether or not claim 26 is unpatentable under 35 U.S.C. §103(a) over Keng in view of Midcap, in view of Janis, in view of Wagner, and further in view of Urban.

4) Whether or not claim 32 is unpatentable under 35 U.S.C. §103(a) over Keng in view of Midcap in view of Janis in view of Wagner in view of Urban, and further in view of Thorp.

GROUPING OF THE CLAIMS

Each of claims 24, 25, 26 are separately patentable and do not stand or fall together.

Claim 32 stands if any of claims 24, 25 or 26 stand. Claims 33 and 34 stand or fall with claim 32.

Claims 20-23 and 27-31 are cancelled in the concurrently submitted Second Amendment After Final.

ARGUMENT

A copy of the Examiner's final rejection, a copies of each amendments filed after final rejection and a copy of the references are attached to this Appeal Brief as Exhibits 1-10. The rejections of each of claims 24, 25, 26 and 32 are separately discussed.

The arguments presented in this brief rely on several sections of the Manual of Patent Examining Procedure (MPEP) and the citations referenced therein. In the

interest of brevity and to avoid repetition, these sections are summarized below as items a-c.

a. **Basic Considerations Which Apply to Obviousness Rejections.**

When applying 35 U.S.C. 103, the following tenets of patent law must be adhered to:

(A) The claimed invention must be considered as a whole;

(B) The references must be considered as a whole and must suggest the desirability and thus the obviousness of making the combination;

(C) The references must be viewed without the benefit of impermissible hindsight vision afforded by the claimed invention; and

(D) Reasonable expectation of success is the standard with which obviousness is determined.

Hodosh v. Block Drug Co., Inc., 786 F.2d 1136, 1143 n.5, 229 USPQ 182, 187 n.5 (Fed. Cir. 1986).

MPEP §2141, Eight Edition, August 2001

b. **Basic Considerations of a *Prima Facie* Case of Obviousness**

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

MPEP §2143, Eight Edition, August 2001

c. Considerations Regarding Suggestion or Motivation to Combine References.
MPEP §2143.01

- The Proposed Modification Cannot Render the Prior Art Unsatisfactory for its Intended Purpose.
- The Proposed Modification Cannot Change the Principle of Operation of a Reference.
- The mere fact that the claimed invention may be within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish a *prima facie* case of obviousness.

Claims 25 and 26 are rejected under 35 U.S.C. §103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner, and further in view of Urban. Although claim 26 stands with claim 25, claim 26 does not fall with claim 25, because claim 26 is separately patentable as is argued below.

Claim 25

Claim 25 recites, among other things, a plurality of concentric ribs (50) radially extending between the floor 46 and the upper portion 42 of the overboot 24. See FIGS. 2 and 3, and specification, page 5, lines 3 and 4. To reject this claim, the Examiner combines the teachings of five references. More specifically, the Examiner rejects claim 25 by combining Urban with Keng in view of Midcap in view of Janis and in view of Wagner. Urban purportedly provides "a plurality of concentric ribs (1) radially extending between a floor (at 10 generally) and the upper portion(3) of the overboot". See Office Action, p. 5, lines 4-7.

There are several arguments against the rejection of claim 25. First, the

Examiner picks and chooses elements of each of the cited references without considering each one as a whole, even though each reference provides a distinct structural overboot design in the crowded art of overboots for different applications, such as walking sticks, bi-pods for firearms, broomsticks, etc. In combining these references, the Examiner asserts that one would be motivated to combine Keng with Midcap to provide better stability on sand and gravel as taught by Midcap. See Office Action, page 3, lines 10-13. Appellant respectfully submits that providing better stability is a common goal in the art of overboots and cannot be used, without more, to combine the distinct designs of the cited references into one design, without destroying in the process some the features of each design, or without changing the principle of each design's operation. For example, it is not clear how the L-shaped feet 81 of Keng (shown in FIG. 1) can be combined with the walking aid tip 100 of Midcap, shown in FIG. 3, or with the walking aid ice-gripper of Janis, FIG. 1 without destroying the function and purpose of each.

Second, Urban cannot be combined with any of Midcap or Keng or Janis or Wagner, because each of these four references teaches an overboot with a flat bottom portion. In contrast, Urban specifically teaches the use of a convex lower surface, which is characterized as a "departure from the traditional crutch tip construction". See column 3, lines 23-36. Therefore, Urban teaches away from using non-convex lower surfaces, such as flat surfaces, and the purpose of Urban would be defeated were it to be combined, were it all possible, with Midcap or Keng, etc. Furthermore, the modification proposed by the Examiner would impermissibly change the principle of

operation of Urban.

Third, even if it were possible to combine Urban with the other cited references, as the Examiner suggests, the combination would not make the present invention obvious. Urban discloses concentric ribs 10 which are formed on a convex lower surface. See FIGS. 3 and 4, and column 2, lines 20-22 of Urban. In contrast, the ribs disclosed in Appellant's patent application are concentric ribs which extend between the floor 46 and the upper portion 42 of the overboot 24, as claim 25 recites. See specification, page 5, lines 3-4. Therefore, even if the cited references were physically combinable, the combination would still not disclose all the limitations of claim 25.

It is respectfully submitted that for the foregoing reasons a *prima facie* case obviousness regarding claim 25 has not been made.

Claim 26

Claim 26 is separately patentable because it includes a further limitation of triangular concentric ribs. Even if it were possible to combine Urban with the other cited references, as the Examiner suggests, the combination would still fail to disclose triangular concentric ribs. Urban discloses a series of concentric grooves 9 with semi-circular cross-section, which define intermediate ribs 10. See FIGS. 3 and 4, and column 2, lines 20-22 of Urban. Therefore, the ribs 10 disclosed in Urban are concentric, but have a cross-section which is defined by the boundaries of the convex lower surface and the semi-circular grooves, i.e. the cross-section of the ribs 10 is not triangular. Furthermore, Urban's ribs 10 are formed on a lower surface which is convex.

In contrast, the ribs disclosed in Appellant's patent application are triangular concentric ribs which extend between the floor 46 and the upper portion 42 of the overboot.

In a different section of the Office Action, page 3, lines 16-18, the Examiner cites Janis as disclosing "ribs (1) extending from the floor (8)" in FIG. 1 of Janis. These elements 1 of Janis are teeth and their construction is described in column 1, line 64 to column 2 line 5. Furthermore, the teeth 1 are not concentric, but are part of a single tubular portion (2) of the ice gripper. See FIG. 1, and column 2, lines 61-62.

Because the combination of the cited references fails to disclose all the elements of claim 26, it is respectfully submitted that claim 26 is patentable over the cited references.

Claim 24

Claim 24 is rejected under 35 U.S.C. §103(a) as being unpatentable over Keng in view of Midcap in view Janis, and further in view of Wagner.

Claims 24 recites, among other things, a continuous annular recess defined by axially extending fingers and circumferentially surrounding the upper portion of the overboot when the upper portion of the overboot is constricted about the upper portion of the foot.

The Examiner asserts that Janis recites a continuous annular recess defined by the extending fingers. See page 4, lines 1-3 and page 8, lines 14-18 of the Office Action.

As can be seen in FIG. 2, page 5, lines 8-10, and page 8, line 21 to page 9, line

2, Appellant's recess is a structural recess that is delineated by an annular flange 54 and an annular ring 42, whether the upper boot of the overboot is constricted or not. Constriction of the overboot makes the existing recess 62 continuous. Setting aside the limitation of continuity of the recess for a moment, Janis does not disclose any structure for a recess that would accommodate a constricting band. For this reason, the strap 5 and the band 14 of Janis stick out of the tubular section 2 of the gripper. See FIGS. 1-3, 5, 6-10.

Even assuming that a recess is disclosed by Janis, the Examiner asserts that "the fingers are fully capable of forming a continuous recess when attached to a foot portion of smaller diameter than that illustrated in FIG. 1". There are several arguments against this assertion. First, claim 24 (and indeed all Appellant's claims) includes the limitation that "the overboot is a thin walled structure constructed of a flexible material that matingly receives the foot portion". If the diameter of the shoe 6, in FIG. 1 of Janis, for example, were made smaller than the diameter of the tubular gripper member 2, there would be an undesirable gap between the gripper member 2 and the shoe 6 adjacent the base member 8, which would not "provide an effectively snug means for attachment to the shoe 6", as taught by Janis, column 2, lines 65-68. On the contrary, the proposed modification would result in a loosely-fitting overboot. Second, the proposed modification of Janis, which appears to be made by impermissible hindsight in view of Appellant's disclosure, would impair the functionality and principle of operation of Janis, and it would also make it impossible to combine Janis with any other cited art to satisfy the limitation of claim 24 that the overboot matingly receives the foot portion.

Another reason that Janis does not contemplate a loosely-fitting tubular member is provided in column 3, lines 54-56 and 64-67, where it is stated that the linear openings may be omitted if the tubular member is constructed from resilient material. See also the claims of Janis, where the function of linear openings is described for a "hard" material. In other words, the linear openings are need to provide "snug means of attachment" when the overboot is made of hard material.

The Examiner provides an alternative argument regarding the limitation of claim 24 that the fingers form a recess, although this argument is made in connection with claims 28 and 32. See Office Action, page 5, lines 17-22, citing Thorp in connection with claim 28, and page 6, lines 18-22. Thorp provides a coupling to secure the end of a brush at one end and the end of an extension pole at the other. There is no motivation to combine a coupling for two sticks with the prior art for overboots cited by the Examiner. The Examiner asserts that the motivation is provided by Thorp because Thorp teaches "forming a recess . . .to prevent the band from slipping off". Thorp, however, teaches that "the outer ends of the spring clamping-jaws 3 are bent outwardly, as shown at 6, forming stops which engage with and prevent the slipping off of the clamps when the latter are loosened and when the coupling is not in service". See column 2, lines 61-66, emphasis added. In contrast, Appellant's disclosure teaches stretching the band 64 to slide it over the annular flange 54 before it is nested within the recess 62. Specification, page 6, lines 7-11. Therefore, the motivation provided by Thorp is contrary to the mode of operation described in Appellant's application. Furthermore, Thorp's coupling cannot provide a "continuous recess" in the constricted

state shown in FIG. 1. The slots 2 serve to provide spring clamping jaws 3. See column 1, lines 41-46. This effect will be significantly reduced or eliminated if the slots were sized to close completely around pole.

For the foregoing reasons, it is respectfully submitted that a *prima facie* case obviousness regarding claim 24 has not been made and claim 24 is patentable over the cited references.

Claim 32

Claims 32 is rejected under 35 U.S.C. §103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner in view of Urban, and further in view of Thorp.

Claim 32 stands if any of claims 24, 25 or 26 stand. In the interests of brevity and to avoid repetition, Appellant incorporates by reference the combined arguments for claims 24-26. It is also noted that Thorp was discussed in connection with claim 24. Claim 32 falls if each of 24, 25 and 26 fall. Claims 33 and 34 stand or fall with claim 32.

CONCLUSION

Appellant respectfully submits that the Examiner has failed to establish a *prima facie* case of obviousness with respect to claims 24-26 and 32-34. Accordingly, reversal of the final rejection of claims 24-26 and 32-34 and allowance of the claims is respectfully requested.

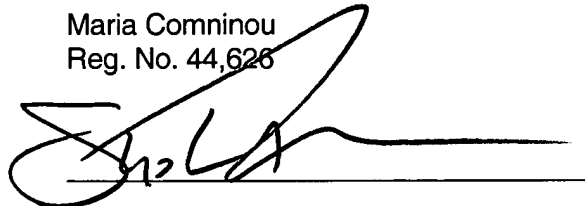
Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C.

Dated: July, 9, 2003

BY:  _____

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APPENDIX

Status of claims without the amendments after final shown in Exhibits 2 and 3.

20. An overboot in combination with a foot portion of a multi-legged firearm support assembly, the foot portion having an upper portion and a lower portion, the upper portion being generally cylindrical, the lower portion having a shape of a truncated cone, the lower portion having a maximum diameter that is greater than a substantially constant diameter of the upper portion, the overboot comprising:

an upper portion circumferentially surrounding the upper portion of the foot portion;

a foot portion; and

a conical portion interconnecting the floor and the upper portion of the overboot, the conical portion upwardly and outwardly extending from the floor;

whereby the overboot is a thin walled structure constructed of a flexible material that matingly receives the foot portion.

21. The overboot of claim 20, wherein the upper portion of the overboot has a substantially smaller diameter than a diameter of the lower portion of the foot and a diameter of the lower portion of the overboot when the upper portion of the overboot is constricted about the upper portion of the foot.

22. The overboot of claim 20, wherein the upper portion of the overboot includes a plurality of slots for accommodating constriction of the upper portion of the overboot about the

upper portion of the foot.

23. The overboot of claim 22, wherein the plurality of slots create a plurality of axially extending fingers.

24. The overboot of claim 23, wherein the axially extending fingers define a continuous annular recess circumferentially surrounding the upper portion of the overboot when the upper portion of the overboot is constricted about the upper portion of the foot.

25. The overboot of claim 20, wherein the lower portion of the overboot includes a plurality of concentric ribs radially extending between the floor and the upper portion of the overboot.

26. The overboot of claim 25, wherein the concentric ribs have a generally triangular shape.

27. The overboot of claim 20, wherein the upper portion of the overboot provides for a band removably encircling the upper portion of the overboot for constriction of the upper portion of the overboot about the upper portion of the foot.

28. The overboot of claim 27, wherein the band is received by a recess formed by and through the fingers of the upper portion of the overboot when the upper portion of the overboot is constricted about the upper portion of the foot.

29. The overboot of claim 27, wherein the band comprises a pliant strap having a diameter in a relaxed state less than the diameter of the upper portion of the overboot.

30. The overboot of claim 27, wherein the band comprises a cord removably tied to the upper portion of the overboot for constriction thereof.

31. The overboot of claim 20, wherein the bottom of the overboot defines a generally flat lower surface.

32. An overboot in combination with a foot portion of a multi-legged firearm support assembly, the foot portion having an upper portion and a lower portion, the upper portion being generally cylindrical, the lower portion having a shape of a truncated cone, the lower portion having a maximum diameter that is greater than a substantially constant diameter of the upper portion, the overboot comprising:

a lower portion downwardly terminating at a floor, the floor defining a generally planar lower surface, the lower portion further including a sidewall upwardly and outwardly extending from the floor and mating with the lower portion of the foot portion, the sidewall including a plurality of concentric, triangularly shaped ribs radially extending about the lower portion of the overboot;

an upper portion integrally formed with and upwardly extending from the lower portion of the overboot, the upper portion of the overboot circumferentially surrounding the upper portion of the foot portion, the upper portion of the overboot having a significantly smaller diameter than the lower portion of the foot portion, the upper portion of the overboot

further including a plurality of slots and fingers to accommodate the foot portion; and

a band constricted about the upper portion of the foot portion for securing and holding the overboot in position, the band received into an annular recess defined by the plurality of fingers and circumferentially surrounding the upper portion of the overboot, the annular recess being continuous about the upper portion of the overboot when the upper portion of the overboot is constricted about the upper portion of the foot portion;

whereby the overboot is a thin walled structure constructed of a flexible material that matingly receives the foot portion.

33. The overboot of claim 32, wherein the band comprises a pliant strap having a diameter in a relaxed state less than the diameter of the upper portion of the overboot.

34. The overboot of claim 32, wherein the band comprises a cord removably tied to the upper portion of the overboot for constriction thereof.

Office Action Summary

Applicati n N .

10/074,868

Applicant(s)

HARRIS, GERALD

Examiner

Naschica S Morrison

Art Unit

3632

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of: _____
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interv w Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This is the second Office Action for serial number 10/074,868, Overboot For A Bi-Pod Adapter, filed on October 25, 2001. Claims 20-34 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 20-31 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

Claim 20 recites the limitation "the floor" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 20, line 8 has ambiguous claim terminology where it is unclear whether latter recitations of originally cited terminology are intended to refer to the originally cited terms. It is unclear if "a floor portion" in claim 20, line 8 is intended to refer to "a floor portion" in claim 20, line 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 20-24, 27, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,711,103 to Keng in view of U.S. Patent 5,713,382 to

Midcap in view of U.S. Patent 4,964,430 to Janis, and further in view of U.S. Patent 2,799,287 to Wagner. Regarding claims 20-24, 27, and 31, Keng discloses a multi-legged firearm support assembly (10) comprising: a mounting block (16), two downwardly extending legs (57,58) each connected to the mounting block and having a width and a foot portion (81), wherein the foot portion includes a generally cylindrical upper portion (adjacent 79) and a lower portion (at 81). Keng does not disclose the lower portion having the shape of a truncated cone. Midcap discloses a foot portion (100) having a generally cylindrical upper portion (110) and a truncated cone-shaped lower portion (120) with a maximum diameter substantially greater than the substantially constant diameter of the upper portion (110). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the foot portion of Keng by providing a lower portion having the shape of a truncated cone because one would have been motivated to provide better stability on sand and gravel as taught by Midcap (Abstract, lines 1-5 and col. 2, lines 8-12). Keng in view of Midcap does not disclose the firearm support assembly including an overboot in combination with the foot portion. Janis discloses a thin walled, flexible overboot (Figs. 1 and 3) for a foot portion (6) comprising: an upper portion circumferentially surrounding the foot portion (portion of 2 that is adjacent 4), a flat floor (8) having a plurality of concentric triangular ribs (1), a cylindrical, lower portion (at 2 generally) extending upwardly from the floor (8) to interconnect the floor (8) and upper portion, and a band/cord (5) removably encircling the upper portion of the overboot; wherein the upper portion includes a plurality of triangularly shaped slots (3) creating a plurality of axially

Art Unit: 3632

extending fingers (see near 4) which define a continuous annular recess and accommodating circumferential constriction of the upper portion about the foot portion (6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the firearm support assembly by providing an overboot attached to the foot portion because one would have been motivated to prevent slippage of the feet on ice or packed snow as taught by Janis (col. 1, lines 5-8). Keng in view of Midcap in view of Janis does not disclose the cylindrical, lower portion (at 2 generally) being conical and extending outwardly from the floor (8). Wagner discloses a foot portion (T) combined with an overboot (Fig. 1), wherein the overboot closely envelops the sides and bottom of the foot portion (T). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the overboot to be sized and shaped identical to the foot portion (i.e. provide a truncated cone-shaped lower portion) because one would have been motivated to prevent relative movement between the overboot and foot portion as taught by Wagner (col. 1, lines 56-61). Regarding claim 30, Keng in view of Midcap in view of Janis and further in view of Wagner fails to disclose the cord being removably tied about the wall. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the overboot by providing a tied cord type band since it is well known in the art to alternatively connect members by a tied cord, for instance by lashing members together in a clamped arrangement.

Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner, and further in view of

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U.S. Patent 4,630,626 to Urban. Keng in view of Midcap in view of Janis in view of Wagner discloses the overboot and foot combination as applied to claim 20 above, but does not disclose the concentric ribs (1) extending radially between the floor and upper portion of the overboot. Urban discloses an overboot (fig. 4) comprising: a cylindrical upper portion (3) for engaging a foot portion and a truncated cone-shaped lower portion (4) with a plurality of concentric ribs (10) radially extending between a floor (at 10 generally) and the upper portion (3) of the overboot. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the overboot by providing concentric ribs extending radially between the floor and upper portion of the overboot because one would have been motivated to increase surface contact and prevent slippage of the feet as taught by Urban (col. 1, lines 52-55).

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner and further in view of U.S. Patent 612,685 to Thorp et al (Thorp). Regarding claim 28, Keng in view of Midcap in view of Janis in view of Wagner discloses the overboot and foot combination as applied to claims 20-24, 27, and 31 above, but does not teach the fingers (see near 4) forming a recess for receiving the band/cord (5). Thorp discloses a coupling (Fig. 2) including annular, radially extending fingers (3) forming a recess (defined beneath the curved surface of 6) for receiving a band (4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the overboot by providing fingers forming a recess because one would have been motivated to prevent the band from slipping off the overboot as taught by Thorp (lines 61-66).

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner and further in view of U.S. Patent 4,947,882 to Levasseur. Regarding claim 29, arguably, the band/cord of Janis comprises a pliant strap (column 2, line 65 described as adjustable) inherently having a diameter, in a relaxed state, less than the diameter of the upper portion of the overboot in a disengaged state (otherwise the band would not be able to clamp the overboot on the foot portion). Nonetheless, Levasseur discloses an overboot (3) including a spring/cord (60) inherently having a smaller diameter than the diameter of the upper portion (51 generally) of the overboot. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the overboot with a spring-type band as a well known art equivalent means for clamping the upper portion of the overboot as taught by Levasseur.

Claims 32 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner in view of Urban, and further in view of Thorp. Regarding claim 32, Keng in view of Midcap in view of Janis in view of Wagner in view of Urban discloses the overboot and foot combination as applied to claim 25 above, but does not teach the fingers (see near 4) forming a recess for receiving the band/cord (5). Thorp discloses a coupling (Fig. 2) including annular, radially extending fingers (3) forming a recess (defined beneath the curved surface of 6) for receiving a band (4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the overboot by providing fingers forming a recess because one would have been motivated to prevent the band from

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slipping off the overboot as taught by Thorp (lines 61-66). Regarding claim 34, Keng in view of Midcap in view of Janis in view of Wagner in view of Urban in view of Thorp fails to disclose the cord being removably tied about the wall. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the overboot by providing a tied cord type band since it is well known in the art to alternatively connect members by a tied cord, for instance by lashing members together in a clamped arrangement.

Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keng in view of Midcap in view of Janis in view of Wagner in view of Urban in view of Thorpe as applied to claim 32 above, and further in view of Levasseur. Regarding claim 33, arguably, the band/cord of Janis comprises a pliant strap (column 2, line 65 described as adjustable) inherently having a diameter, in a relaxed state, less than the diameter of the upper portion of the overboot in a disengaged state (otherwise the band would not be able to clamp the overboot on the foot portion). Nonetheless, Levasseur discloses an overboot (3) including a spring/cord (60) inherently having a smaller diameter than the diameter of the upper portion (51 generally) of the overboot. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the overboot with a spring-type band as a well known art equivalent means for clamping the upper portion of the overboot as taught by Levasseur.

Respons to Arguments

Applicant's arguments filed 9/24/02 have been considered but are not persuasive.

Regarding Applicant's argument that "Janis does not disclose a flexible overboot" and "Janis teaches away from using a flexible material", examiner respectfully disagrees. Janis does disclose the overboot being constructed of a "flexible" material since "flexible" is defined by Merriam-Webster's Collegiate Dictionary as "capable of being flexed" and since "flex" is defined as "to bend repeatedly". Clearly the overboot of Janis is constructed of a "flexible" material since Janis teaches that the overboot may be attached to a foot portion at will (i.e. repeatedly) (col. 1, lines 32-35).

Regarding Applicant's argument that "Janis... discloses a plurality of triangular ribs or teeth extending from the generally cylindrical lower portion or outwardly-extending section 12", examiner respectfully disagrees. The rejection applied relies on the embodiment of Figures 1, 3, and 5, not the alternative embodiment of Figures 2, 4, and 6 to which the Applicant's arguments are directed. In figure 1 specifically, Janis clearly discloses the ribs (1) extending from the floor (8).

Regarding Applicant's argument that Janis does not disclose the axially extending fingers cooperating to form an axially surround recess, examiner respectfully disagrees. Although Janis does not *illustrate* the fingers forming a continuous recess, the fingers are fully capable of forming a continuous recess when attached to a foot portion of a smaller diameter than that illustrated in Figure 1.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. 2002/0074467 to Harris discloses an overboot for a bi-pod.

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Naschica S. Morrison, whose telephone number is (703) 305-0228. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Leslie Braun can be reached at 703-308-2156. The fax machine telephone number for the Technology Center is (703) 872-9326 (formal amendments) or (703) 308-3519 (informal amendments/communications).

Any inquiry of a general nature or relating to the status of this Application should be directed to the Technology Center receptionist at (703) 308-2168.

Naschica S. Morrison
Patent Examiner
Art Unit 3632
12/13/02

**KIMBERLY WOOD
PRIMARY EXAMINER**

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
Attorney Docket No. 3408-000014/COA

Application No.: 10/074,868
Filing Date: October 25, 2001
Applicant: Gerald Harris
Group Art Unit: 3632
Examiner: Naschica S. Morrison
Title: OVERBOOT FOR A BI-POD ADAPTER

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Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT AFTER FINAL UNDER 37 C.F.R. § 1.116

Kindly reconsider and amend the above-referenced application as follows:

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 7 of this paper.

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

20. (Currently Amended) An overboot in combination with a foot portion of a multi-legged firearm support assembly, the foot portion having an upper portion and a lower portion, the upper portion being generally cylindrical, the lower portion having a shape of a truncated cone, the lower portion having a maximum diameter that is greater than a substantially constant diameter of the upper portion, the overboot comprising:

an upper portion circumferentially surrounding the upper portion of the foot portion; and

~~a foot portion~~ floor; and

a conical portion interconnecting the floor and the upper portion of the overboot, the conical portion upwardly and outwardly extending from the floor;

whereby the overboot is a thin walled structure constructed of a flexible material that matingly receives the foot portion.

21. (Previously Added) The overboot of claim 20, wherein the upper portion of the overboot has a substantially smaller diameter than a diameter of the lower portion of the foot and a diameter of the lower portion of the overboot when the upper portion of the overboot is constricted about the upper portion of the foot.

22. (Previously Added) The overboot of claim 20, wherein the upper portion of the overboot includes a plurality of slots for accommodating constriction of the upper portion of the overboot about the upper portion of the foot.

23. (Previously Added) The overboot of claim 22, wherein the plurality of slots create a plurality of axially extending fingers.

24. (Previously Amended) The overboot of claim 23, wherein the axially extending fingers define a continuous annular recess circumferentially surrounding the upper portion of the overboot when the upper portion of the overboot is constricted about the upper portion of the foot.

25. (Previously Added) The overboot of claim 20, wherein the lower portion of the overboot includes a plurality of concentric ribs radially extending between the floor and the upper portion of the overboot.

26. (Previously Added) The overboot of claim 25, wherein the concentric ribs have a generally triangular shape.

27. (Previously Added) The overboot of claim 20, wherein the upper portion of the overboot provides for a band removably encircling the upper portion of the overboot for constriction of the upper portion of the overboot about the upper portion of the foot.

28. (Previously Added) The overboot of claim 27, wherein the band is received by a recess formed by and through the fingers of the upper portion of the overboot when the upper portion of the overboot is constricted about the upper portion of the foot.

29. (Previously Added) The overboot of claim 27, wherein the band comprises a pliant strap having a diameter in a relaxed state less than the diameter of the upper portion of the overboot.

30. (Previously Added) The overboot of claim 27, wherein the band comprises a cord removably tied to the upper portion of the overboot for constriction thereof.

31. (Previously Added) The overboot of claim 20, wherein the bottom of the overboot defines a generally flat lower surface.

32. (Previously Added) An overboot in combination with a foot portion of a multi-legged firearm support assembly, the foot portion having an upper portion and a lower portion, the upper portion being generally cylindrical, the lower portion having a shape of a truncated cone, the lower portion having a maximum diameter that is greater than a substantially constant diameter of the upper portion, the overboot comprising:

a lower portion downwardly terminating at a floor, the floor defining a generally planar lower surface, the lower portion further including a sidewall upwardly and outwardly extending from the floor and mating with the lower portion of the foot portion, the sidewall including a plurality of concentric, triangularly shaped ribs radially extending about the lower portion of the overboot;

an upper portion integrally formed with and upwardly extending from the lower portion of the overboot, the upper portion of the overboot circumferentially surrounding the upper portion of the foot portion, the upper portion of the overboot having a significantly smaller diameter than the lower portion of the foot portion, the upper portion of the overboot further including a plurality of slots and fingers to accommodate the foot portion; and

a band constricted about the upper portion of the foot portion for securing and holding the overboot in position, the band received into an annular recess defined by the plurality of fingers and circumferentially surrounding the upper portion of the overboot, the annular recess being continuous about the upper portion of the overboot

when the upper portion of the overboot is constricted about the upper portion of the foot portion;

whereby the overboot is a thin walled structure constructed of a flexible material that matingly receives the foot portion.

33. (Previously Added) The overboot of claim 32, wherein the band comprises a pliant strap having a diameter in a relaxed state less than the diameter of the upper portion of the overboot.

34. (Previously Added) The overboot of claim 32, wherein the band comprises a cord removably tied to the upper portion of the overboot for constriction thereof.

REMARKS

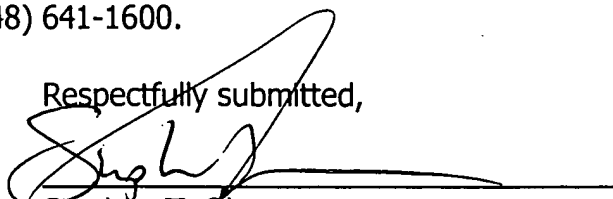
Applicant filed a Notice of Appeal on April 11, 2003. Claims 20-34 are now pending in the application. This Amendment After Final is being filed to address the Examiner's rejections under 35 U.S.C. §112, second paragraph, and to thereby put the application into a better condition for allowance.

CLAIM REJECTIONS – 35 U.S.C. §112

Claims 20-31 stand rejected under 35 U.S.C. 112, second paragraph as failing to set forth the subject matter which Applicant regards as the invention. Applicant has amended the claims to address the Examiner's §112 rejections. Accordingly, Applicant respectfully submits that the §112 rejections are now moot.

If the Examiner has any questions regarding the present amendment, she should not hesitate to contact the undersigned at (248) 641-1600.

Respectfully submitted,



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Date: June 2, 2003
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Dock t No. 3408-000014/COA

Application No.: 10/074,868
Filing Date: October 25, 2001
Applicant: Gerald Harris
Group Art Unit: 3632
Examiner: Naschica S. Morrison
Title: OVERBOOT FOR A BI-POD ADAPTER

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

**SECOND AMENDMENT AFTER FINAL UNDER 37 C.F.R. § 1.116
SUBMITTED CONCURRENTLY WITH APPEAL BRIEF AND WITH EXTENSION FEE**

Kindly reconsider and amend the above-referenced application as follows:

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 6 of this paper.

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

20 – 23 (Cancelled)

24. (Currently Amended – Presented in Independent Form) ~~The overboot of claim 22,~~ An overboot in combination with a foot portion of a multi-legged firearm support assembly, the foot portion having an upper portion and a lower portion, the upper portion being generally cylindrical, the lower portion having a shape of a truncated cone, the lower portion having a maximum diameter that is greater than a substantially constant diameter of the upper portion, the overboot comprising:

an upper portion circumferentially surrounding the upper portion of the foot portion, wherein the upper portion of the overboot includes a plurality of slots for accommodating constriction of the upper portion of the overboot about the upper portion of the foot portion, and wherein the plurality of slots create a plurality of axially extending fingers, wherein the axially extending fingers define a continuous annular recess circumferentially surrounding the upper portion of the overboot when the upper portion of the overboot is constricted about the upper portion of the foot portion;

a floor; and

a conical portion interconnecting the floor and the upper portion of the overboot, the conical portion upwardly and outwardly extending from the floor;

whereby the overboot is a thin walled structure constructed of a flexible material that matingly receives the foot portion.

25. (Currently Amended – Presented in independent form) ~~The overboot of claim 20~~ An overboot in combination with a foot portion of a multi-legged firearm support assembly, the foot portion having an upper portion and a lower portion, the upper portion being generally cylindrical, the lower portion having a shape of a truncated cone, the lower portion having a maximum diameter that is greater than a substantially constant diameter of the upper portion, the overboot comprising:

an upper portion circumferentially surrounding the upper portion of the foot portion;

a floor; and

a conical portion interconnecting the floor and the upper portion of the overboot, the conical portion upwardly and outwardly extending from the floor;

whereby the overboot is a thin walled structure constructed of a flexible material that matingly receives the foot portion and;

wherein the lower portion of the overboot includes a plurality of concentric ribs radially extending between the floor and the upper portion of the overboot.

26. (Previously Added) The overboot of claim 25, wherein the concentric ribs have a generally triangular shape.

27 – 31 (Cancelled)

32. (Previously Added) An overboot in combination with a foot portion of a multi-legged firearm support assembly, the foot portion having an upper portion and a lower portion, the upper portion being generally cylindrical, the lower portion having a shape of a truncated cone, the lower portion having a maximum diameter that is greater than a substantially constant diameter of the upper portion, the overboot comprising:

a lower portion downwardly terminating at a floor, the floor defining a generally planar lower surface, the lower portion further including a sidewall upwardly and outwardly extending from the floor and mating with the lower portion of the foot portion, the sidewall including a plurality of concentric, triangularly shaped ribs radially extending about the lower portion of the overboot;

an upper portion integrally formed with and upwardly extending from the lower portion of the overboot, the upper portion of the overboot circumferentially surrounding the upper portion of the foot portion, the upper portion of the overboot having a significantly smaller diameter than the lower portion of the foot portion, the upper portion of the overboot further including a plurality of slots and fingers to accommodate the foot portion; and

a band constricted about the upper portion of the foot portion for securing and holding the overboot in position, the band received into an annular recess defined by the plurality of fingers and circumferentially surrounding the upper portion of the overboot, the annular recess being continuous about the upper portion of the overboot when the upper portion of the overboot is constricted about the upper portion of the foot portion;

whereby the overboot is a thin walled structure constructed of a flexible material that matingly receives the foot portion.

33. (Previously Added) The overboot of claim 32, wherein the band comprises a pliant strap having a diameter in a relaxed state less than the diameter of the upper portion of the overboot.

34. (Previously Added) The overboot of claim 32, wherein the band comprises a cord removably tied to the upper portion of the overboot for constriction thereof.

REMARKS

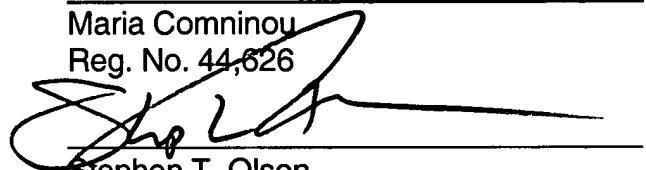
Applicant filed a Notice of Appeal on April 11, 2003 and is concurrently submitting an Appeal Brief. Claims 20-34 are pending in the application. This Second Amendment After Final is being filed to bring the application in better condition for Appeal. Claims 20 – 23 and 27 – 31 are cancelled. Claims 24 and 25 are amended to be presented as independent form including all the limitations of the base claim and the intervening claims.

If the Examiner has any questions regarding the present amendment, she should not hesitate to contact the undersigned at (248) 641-1600.

Respectfully submitted,



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Date: July 9, 2003
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